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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,145

12/04/2003

John Raymond Essig JR.

001-US-02

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7590

06/01/2006

NATH & ASSOCIATES

112 South West Street
Alexandria, VA 22314

EXAMINER

CHEN, SHIH CHAO

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,145

Applicant(s)

ESSIG ET AL.

Examiner

Shih-Chao Chen

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/5/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. The request filed on August 05, 2005 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/729,145 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6, 11, 15-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Anmelder (DE 4441201 A1).

Regarding claim 1, Anmelder teaches in figures 1-4 a multifunction field-deployable apparatus comprising: a ring support element [1], the ring support element comprising at least one substantially tubular and inflatable ring, the ring support element defining a vacant center [3]; at least one inflation means [7] for inflating the ring support element; at least two pressure-deformable membranes [2] extending across the vacant center of the ring support element, the membranes and the ring support element defining at least one inflatable reflector chamber, at least one of the membranes is reflective to electromagnetic radiation; and at least one pressure adjusting or inflating means [4] for adjusting the pressure within or inflating the reflector chamber.

Regarding claim 2, Anmelder teaches in figures 1-4 the apparatus according to claim 1, wherein the ring support element [1] and the membranes [2] comprise substantially thin, and flexible sheets comprising at least one type or class of substantially polymeric materials, whereby the apparatus is foldable (i.e. foldable reflector).

Regarding claim 3, Anmelder teaches in figures 1-4 the apparatus according to claim 1, wherein the inflation means [7] and the pressure adjusting means [4] include at least one valve comprising a flexible conduit closed by a closure means consisting of an affixed plug (See Fig. 2).

Regarding claim 6, Anmelder teaches in figures 1-4 the apparatus according to claim 1, wherein the plurality of pressure-deformable membranes [2] comprise at least two reflective membranes including a primary reflective membrane and at least one redundant or auxiliary reflective membrane (See Fig. 2-4).

Regarding claim 11, Anmelder teaches in figures 1-4 the apparatus according to claim 1, wherein the ring support element [1] comprises at least two of the substantially inflatable and tubular rings, at least two of the rings being located between at least two of the pressure-deformable membranes [2], whereby the internal volume capacity of the apparatus is increased.

Regarding claim 15, Anmelder teaches in figures 1-4 a field-deployable apparatus for use as a radiant electromagnetic energy concentrating, focusing or beaming apparatus comprising: a ring support element [1], the ring support element comprising at least one substantially tubular and inflatable ring, the ring support element

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defining a vacant center [3]; at least one inflation means [7] for inflating the ring support element; at least two pressure-deformable membranes [2] extending across the vacant center of the ring support element, the membranes and the ring support element defining at least one inflatable reflector chamber, at least one of the membranes is reflective to electromagnetic radiation; and at least one pressure adjusting or inflation means [4] for adjusting the pressure within or inflating the reflector chamber; at least one means for performing at least one function not involving concentrating, focusing, and beaming radiant electromagnetic energy, the performing means is a means for providing thermal insulation (e.g. portable solar stoves).

Regarding method claims 16-17, the apparatus discussed above would perform the claimed method.

Regarding claim 20, Anmelder teaches in figures 1-4 a multifunction field-portable apparatus comprising: a ring support element [1], the ring support element comprising at least one substantially tabular and inflatable ring, the ring support element defining a vacant center [3]; at least one inflation means [7] for inflating the ring support element; at least two pressure-deformable membranes [2] extending across the vacant center of the ring support element, the membranes and the ring support element defining at least one inflatable central chamber; and at least one pressure adjusting or inflation means [4] for adjusting the pressure within or inflating the chamber, whereby the apparatus is operable to provide at least one non-electromagnetic function (e.g. portable solar stoves).

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-53 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 and 58-67 of copending Application No. 10/156,814. Although the conflicting claims are not identical, they are not patentably distinct from each other because the applications are claiming common subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-

1819. The examiner can normally be reached on Monday-Thursday from 7 AM to 5:30 PM, Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shih-Chao Chen
Primary Examiner
Art Unit 2821

Shih-Chao Chen
SHIH-CHAO CHEN
PRIMARY EXAMINER

SXC
May 16, 2006